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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Adrian Charles Paskins

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07/23/2007

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.

1940 DUKE STREET

ALEXANDRIA, VA 22314

EXAMINER

SHELEHEDA, JAMES R

ART UNIT

PAPER NUMBER

2623

NOTIFICATION DATE

DELIVERY MODE

07/23/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Office Action Summary**

Application No.

09/630,971

Applicant(s)

PASKINS, ADRIAN CHARLES

Examiner

James Sheleheda

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 and 24-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 24-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/16/07 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-16 and 24-29 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 6, 9-11, 13 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klosterman (6,453,471) in view of Marshall et al. (Marshall) (6,419,137). As to claim 1, Klosterman discloses a system (Fig. 2) for providing a

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plurality of sets of broadcast data service data (preview trailers; column 2, lines 56-65) transmitted together with broadcast digital television data as part of a broadcast signal (column 2, line 66-column 3, line 8) comprising:

a processor (100) configured to extract the plurality of sets of the broadcast data service data available from a broadcast carousel included in the broadcast signal (column 10, lines 20-48);

the broadcast data service data defining a plurality of audio/video data sets (audio/video data making up the preview trailers; column 10, lines 19-30), the digital audio/video data sets including television clips (column 1, lines 61-67);

a display configured to provide a list of a plurality of sets of the digital audio/video data sets (see Fig 1 and 8; column 10, lines 11-31); and

a controller responsive to a user initiated selection signal provided by an end user (user selection from the guide; column 10, lines 11-31) to cause the output of a user selected one of the plurality of digital audio/video data sets (column 10, lines 11-56) selected from the list (column 10, lines 11-31) simultaneously with continued receipt of the broadcast digital television data (wherein the broadcast television signals continues to be broadcast and received by the system; see Fig. 9-10, column 10, lines 40-56), the selected one of the broadcast data service data plurality of sets having digital audio/video data in non-real time (column 3, lines 9-31 and column 10, lines 19-56),

the selection signal being provided at any time during receipt of the broadcast digital television data (wherein a television guide may be opened at any time; column

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10, lines 11-31 and column 2, lines 51-65) and independently of the broadcast digital television data (wherein a user opening the guide is independent of the broadcast television program; column 10, lines 11-31 and column 2, lines 51-65) and the controller is responsive at any time during receipt of the broadcast digital television data and independently of the broadcast digital television data to output said selected portions (column 10, lines 11-56),

wherein the processor converts the digital audio/video data of the plurality of sets of the broadcast data service data into real time audio/video data (column 3, lines 9-31 and column 10, lines 11-56).

While Klosterman discloses wherein the broadcast data service data is periodically broadcast in a carousel (Figs. 9-10; column 10, lines 32-48) and a memory (Fig. 3; column 5, line 60-column 6, line 37), he fails to specifically disclose extracting and storing all of the current plurality of sets of broadcast data service data in memory.

In an analogous art, Marshall discloses a receiving system (Fig. 1) allowing a user to view trailers for selected programming (video clips; column 2, lines 54-61) wherein the trailers are received and extracted from received television signals (column 1, lines 40-52 and column 3, lines 2-6), in non-real time (as the videos are received and stored prior to real-time playback; column 1, lines 40-52) and stored in memory (column 1, lines 48-52 and column 2, lines 54-61) for the typical benefits of allowing a user to access a trailer on demand without a delay in waiting for it to be transmitted from a programming source (column 1, lines 16-22) and reducing the required transmissions and bandwidth of the trailers.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman's system to include extracting and storing all of the current plurality of sets of broadcast data service data in memory, as taught by Marshall, for the typical benefits of allowing a user to access a trailer on demand without a delay in waiting for it to be transmitted from a programming source and reducing the required transmissions and bandwidth of the trailers.

As to claims 2 and 6, while the current combination of Klosterman and Marshall disclose wherein the digital audio/video data of the plurality of sets of the broadcast data service data is received and stored off-line (wherein the advertisements are stored for later use instead of immediate display; see Marshall at column 1, lines 45-51), they fail to specifically disclose wherein the audio/video data is compressed and the processor decompresses the audio/video data using a predefined protocol.

The examiner takes official notice that it was notoriously well known in the art at the time of invention by applicant to compress digital signals for transmission and storage and then decompress them for use, requiring some predefined compression/decompression protocol, for the well known benefits provided by compression such as reducing both the bandwidth and storage needed to handle the data.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman and Marshall's system to include wherein the audio/video data is compressed and the processor decompresses the audio/video

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data using a predefined protocol to take advantage of the reduced bandwidth and storage requirements for a digital signal, as typically provided by compression.

As to claim 9, Klosterman and Marshall disclose wherein the memory is a semiconductor memory (RAM; see Klosterman at Fig. 3 and Marshall at column 3, lines 2-6).

As to claim 10, Klosterman and Marshall disclose a digital television receiver for providing the broadcast signal to the processor (see Klosterman at column 3, lines 17-22).

As to claim 11, Klosterman and Marshall disclose wherein the system is a single integral unit (see Klosterman at column 3, lines 38-48).

As to claim 13, Klosterman and Marshall disclose wherein the digital television receiver selectively provides digital television data for display (output of tuned television channels; see Klosterman at column 3, lines 17-22 and lines 59-67) and wherein the processor extracts the sets of the plurality of sets of the broadcast data service data irrespective of that display (wherein the downloading and storing of ads is unrelated to the currently displayed video or channel; see Klosterman at column 10, lines 19-56 and Marshall at column 1, lines 40-52).

As to claims 25 and 27, while Klosterman and Marshall disclose wherein the digital television data is converted into real time audio/video data and transmitted in packets (wherein television content arranged and transmitted for real-time receipt and viewing; see Klosterman at column 3, lines 38-67 and lines 1-16), they fail to specifically disclose wherein the digital television data is transmitted in packets generated according to an MPEG standard, such as MPEG2.

The examiner takes official notice that it was notoriously well known in the art at the time of invention by applicant to utilize an MPEG standard, such as MPEG2, to packetize data for transmission and storage for the typical benefits of utilizing a well established standard means for video compression which reduces both the bandwidth and storage needed to handle the data.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman and Marshall's system to include wherein the digital television data is transmitted in packets generated according to an MPEG standard, such as MPEG2, for the typical benefits of utilizing a well established standard means for video compression which reduces both the bandwidth and storage needed to handle the data.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klosterman and Marshall as applied to claim 2 above, and further in view of Hölzle et al. (Hölzle) (5,970,249) (of record).



As to claim 3, while Klosterman and Marshall, as addressed above, disclose wherein the processor processes the plurality of sets of the broadcast data service data, they fail to specifically disclose wherein the data is processed at times of low usage.

In an analogous art, Hölzle discloses a computing system (Fig. 5) wherein program compiling is to be performed is delayed (column 4, lines 1-8) until a period of inactivity by the processor (or low usage; column 4, lines 9-23) for the benefit of more efficiently utilizing system resources (column 4, lines 19-23).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman and Marshall's system to include wherein the data is processed at time of low usage, as taught by Hölzle, to provide the common benefit of ensuring that a computer system runs as efficiently as possible.

6. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klosterman and Marshall as applied to claim 1 above, and further in view of Winston (6,434,653) (of record).

As to claims 4 and 5, while Klosterman and Marshall disclose wherein the processor processes the data, they fail to specifically disclose wherein the processor operates in a batch processing method with data loaded locally from the memory in small chunks.

In an analogous art, Winston discloses a computer system (Fig. 1; 100) containing a processor (101 or 104) with an internal cache (102 or 105; column 3, lines 18-19) wherein data from a local memory (113) is loaded into the caches for processing

(column 3, lines 18-23) for the benefit of providing the processor with faster access to memory (column 3, lines 21-23).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman and Marshall's system to include wherein the processor operates in a batch processing method with data loaded locally from the memory in small chunks, as taught by Winston, for the benefit of providing the processor with faster access to memory by loading data into caches local to the processor.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klosterman and Marshall as applied to claim 1 above, and further in view of Russo (5,619,247) (of record).

As to claim 7, while the current combination of Klosterman and Marshall disclose wherein the digital audio/video data of the plurality of sets of the broadcast data service data is received and stored off-line (wherein the advertisements are stored for later use instead of immediate display; see Marshall at column 1, lines 45-51), they fail to specifically disclose wherein the audio/video data is compressed and the processor decompresses the audio/video data using a downloaded protocol.

The examiner takes official notice that it was notoriously well known in the art at the time of invention by applicant to compress digital signals for transmission and storage and then decompress them for use, requiring some predefined compression/decompression protocol, for the well known benefits provided by

compression such as reducing both the bandwidth and storage needed to handle the data.

Additionally, in an analogous art, Russo discloses a video distribution system (Fig. 1; column 3, lines 40-64) wherein a proprietary compression algorithm is utilized (column 7, lines 66-67 and column 8, lines 1-6) which is programmable with downloaded signals (column 8, lines 6-10) for the typical benefits for providing additional security (column 8, lines 2-10).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman and Marshall's system to include wherein the audio/video data is compressed and the processor decompresses the audio/video data to take advantage of the reduced bandwidth and storage requirements for a digital signal, as typically provided by compression.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to further modify Klosterman and Marshall's system to include a downloaded protocol, as taught by Russo, for the typical benefits of providing additional security to distributed contents.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klosterman and Marshall as applied to claim 1 above, and further in view of Kostreski et al. (Kostreski) (5,729,549) (of record).

As to claim 8, while Klosterman and Marshall discloses wherein the broadcast data service data is received and processed offline (wherein the advertisements are

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stored for later use instead of immediate display; see Marshall at column 1, lines 45-51), they fail to specifically disclose wherein the processor conducts decryption of the data using a key.

In an analogous art, Kostreski discloses a system for receiving a digital broadcast channel (Fig. 8; column 25, lines 15-22) containing video, audio and data packets (column 25, lines 22-26) wherein the a decryption key is used to decrypt the received packets (column 25, lines 26-35) for the benefit of only allowing access to programming to authorized users (column 25, lines 26-31).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman and Marshall's system to include wherein the processor conducts decryption of the data using a key, as taught by Kostreski, for the benefit of enabling cable providers to protect their programming by preventing access by unauthorized users.

9. Claims 12, 24, 26, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klosterman and Marshall and further in view of Trovato (6,701,526) (of record).

As to claim 12, while Klosterman and Marshall disclose a memory, they fail to specifically disclose wherein the memory is separate from the digital television receiver and linked by means of a network connection.

In an analogous art, Trovato discloses a cable television receiver (Fig. 2; column 4, lines 29-35) for receiving and extracting data (column 3, lines 66-67 and column 4,

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lines 1-5) and transmitting the extracted data over an IEEE 1394 connection to an external device (column 10, lines 42-51) for storage (column 10, lines 49-51) for providing the typical benefit of a more flexible system utilizing a portable and modular storage device.

It would have obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman and Marshall's system to include wherein the memory is separate from the digital television receiver and linked by means of a network connection, as taught by Trovato, for the typical benefit of providing a cable user with a portable and modular storage device with can be easily moved and replaced.

As to claim 24, Klosterman, Marshall and Trovato disclose wherein the network connection is an IEEE 1394 interface (see Trovato at column 10, lines 42-51).

As to claims 26, 28 and 29, while Klosterman and Marshall disclose wherein at least some of the sets of the plurality of sets of the broadcast data service data are transmitted in non-real time and the broadcast digital television data are transmitted according to a protocol (as indicated in claims 1 and 25 above), they fail to specifically disclose wherein at least some of the data is transmitted according to an alternative protocol.

In an analogous art, Trovato discloses a cable television receiver (Fig. 2; column 4, lines 29-35) for receiving and extracting data (column 3, lines 66-67 and column 4, lines 1-5) and transmitting the extracted data in an alternative protocol (over an IEEE

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1394 connection to an external device; column 10, lines 42-51) for storage (column 10, lines 49-51) for providing the typical benefit of a more flexible system utilizing a portable and modular storage device.

It would have obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman and Marshall's system to include wherein at least some of the data is transmitted according to an alternative protocol, as taught by Trovato, for the typical benefit of providing a cable user with a means to connect to a portable and modular storage device with can be easily moved and replaced.

10. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klosterman and Marshall as applied to claim 1 above, and further in view of Inoue et al. (Inoue) (US2002/0016963A1) (of record).

As to claim 14, while Klosterman and Marshall disclose extracting and storing sets of the plurality of sets, they fail to specifically disclose wherein the controller is configured to identify corresponding extracted and stored sets of the plurality of sets and replaces sets in the memory with respective sets extracted from the broadcast signal.

In an analogous art, Inoue discloses an information receiving apparatus (Fig. 14; 100; paragraph 195) for receiving additional information transmitted with broadcast video (paragraph 75) wherein a controller (input and output control unit, 16) identifies if newly received information is an update of previously stored information (paragraph 200, lines 1-9 and lines 18-40) and replaces the previously stored portions with the

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newly received update (paragraph 200, lines 27-40) for the typical benefit of ensuring a user has the most up to date information available (paragraph 203).

It would have obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman and Marshall's system to include wherein the controller is configured to identify corresponding extracted and stored sets of the plurality of sets and replaces sets in the memory with respective sets extracted from the broadcast signal, as taught by Inoue, for the common benefit of providing the most recent broadcast data available to cable television viewers.

As to claim 15, Klosterman, Marshall and Inoue disclose wherein, if periodically the broadcast signal includes all of the plurality of sets of the broadcast data service (see Inoue at paragraph 202, lines 1-5), the controller can store all of the received plurality of sets in the memory (see Inoue at paragraph 202, lines 1-5).

As to claim 16, Klosterman, Marshall and Inoue disclose wherein the controller accesses an additional data channel to obtain and store in the memory all of the sets of the plurality of sets of the broadcast data service (wherein the trailer signals may be transmitted with the broadcast programming or in a separate data stream; see Klosterman at Fig. 9 and 10, column 2, line 66-column 3, line 16 and column 10, lines 32-48).

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### **Conclusion**

11. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sheleheda whose telephone number is (571) 272-7357. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James Sheleheda  
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